



**Governor Terry E. Branstad**  
**Lt. Governor Kim Reynolds**

*Geri D. Huser, Chair*  
*Elizabeth S. Jacobs, Board Member*  
*Nick Wagner, Board Member*

November 30, 2016  
File: E-20994, AM20

Leanna D. Whipple  
ITC Midwest LLC  
100 East Grand Avenue, Suite 230  
Des Moines, IA 50309

RE: 2<sup>nd</sup> Staff Review Letter

Dear Ms. Whipple:

On October 14, 2016, ITC Midwest LLC filed revisions to the petition and exhibits. Staff review of the revisions has identified the following deficiencies which require correction:

**A. Issues not addressed from Staff Review Letter dated 9-9-2016:**

1. Exhibit C – Segment 1 of 4 (double 69 kV w/ IPL 3-phase ub)
  - a. Item 4.k.; please indicate the vertical spacing between the proposed line's bottom phase conductor and the distribution underbuild on the structure drawing 69ASGP1-D2V3-L.
  - b. Item 4.k.; please indicate the phase-to-ground/pole surface clearance along a dead-end insulator on the structure drawing 69ASGP1-D2V3-L.
2. Exhibit C – Segment 2 of 4 (single 69 kV w/ IPL 3-phase ub)
  - a. Item 5.b.; please indicate the phase-to-ground/pole surface clearance along a dead-end insulator on the structure drawing 69D2V3.
3. Exhibit C – Segment 3 of 4 (single 69 kV w/o ub)
  - a. Item 6.e.; please indicate the phase-to-ground/pole surface clearance along a dead-end insulator on the structure drawing 69D2V3.
4. Exhibit C – Segment 4 of 4 (double 161/69 kV w/o ub)

- a. Item 7.j.; please indicate the phase-to-ground/pole surface clearance along the longest horizontal post insulator, and its manufacturer & catalog number on the structure drawing 161-TNSP-L-U.
- b. Item 7.i.; please indicate the vertical clearance from the 161 kV circuit's bottom phase conductor to the proposed 69 kV line's closest phase conductor.

**B. Additional comments as a result of changes and inadvertently changes:**

1. The Petition

- a. Page 1, last paragraph; please update the proposed construction schedule and the number of obtained easements (if any).

2. Exhibit B

- a. Section 25, T83N, R7W, SE1/4, the two parallel streets identified as Red Oak Dr. A recent field inspection discovered the one to the north as Red Oak Dr. and the one to the south as **Twin Ridge Court**. Please revise.
- b. Section 36, T83N, R7W, SW1/4, the street identified as Otis Dr. A recent field inspection discovered it as **Otis Dr. SE**. Please revise.
- c. Section 31, T83N, R6W, NE1/4, the street identified as Cedar Bend Ln SW. A recent field inspection discovered it as **Cedar Bend Ln**. Please revise.
- d. Section 29, T83N, R6W, NW1/4, the street identified as Highview Dr. SE. A recent field inspection discovered it as **Highview Dr**. Please revise.
- e. Section 6, T82N, R6W, SE1/4, item 3.h. of 1<sup>st</sup> staff review letter. A recent field inspection discovered such street as **Honey Grove Rd**. Please revise.
- f. Section 4, T82N, R6W, SE1/4, the street identified as Cedar Ridge Rd. A recent field inspection discovered it as **Cedar Woods Rd**. Please revise.
- g. Section 29, T83N, R6W, S1/2, "4a o dc w/ 1c o" is inconsistent with line 1e's symbol. Shouldn't it be "4a o dc w/ **1e** o"? Please revise or explain. Second, same section, south of the railroad track and near the section's southwest corner; please refer to 1<sup>st</sup> comment, and revise.
- h. The Legend, list of line symbols, left column, 3<sup>rd</sup> line symbol, its definition is inconsistent with Exhibit A. Staff suggests the following language: **"Proposed 69 kV (Existing double circuit 161/34.5 kV to be removed and rebuilt to 161/69 kV) – ITC"**. Please revise.

3. Exhibit C – Segment 2 of 4 (single 69 kV w/ IPL 3-phase ub)
  - a. Structure drawing 69D2V3 (page 9) is not readable. Please revise.
  - b. The switch structure drawing JOOS1S3L; please indicate phase-to-ground clearances along a suspension dead-end insulator, a vertical post insulator of a switch (from a conductor point to a metal switch frame/platform), and from a conductor point of a vertical post insulator horizontally to a pole surface.
4. Exhibit C – Segment 3 of 4 (single 69 kV w/o ub)
  - a. Page 1, line 4, Section 31 is inconsistent with Exhibits A & B. Please revise.
  - b. Structure drawing 69D2V3 (page 15) is not readable; please revise.
5. Exhibit C – Segment 4 of 4 (double 161/69 kV w/o ub)
  - a. Page 1, line 4, Section 31 is inconsistent with Exhibits A & B. Please revise.
  - b. ITC's October 14, 2016 response to item 7.e. of initial staff review letter is inconsistent with the existing record in Docket no. E-20994. According to the record, the existing conductor is a regular **ACSR** conductor and not a SD type. Its size is 954 kcmil and its stranding is **45/7**. Therefore, please explain or revise page 2, line 38, last two filled-in blanks.
  - c. In the structure drawing 161-TNSP-L-U, "161 kV Insulator Detail", the phase-to-ground/pole surface clearance along a horizontal post insulator was inadvertently changed. Please explain the change or revise the clearance. Second, in the same insulator detail of 161 kV, the phase-to-ground along a suspension insulator was also inadvertently changed. Please revise. Third, ITC's October 14, 2016 response to item 7.j. of initial staff review letter is inconsistent with the voltage indicated in the Petition and Exhibit A. Please explain or revise accordingly. Fourth, in the "34.5 kV Insulator Detail", the phase-to-ground/pole surface along the right horizontal post insulator was inadvertently changed. Please explain the change or revise the clearance.

Please respond within thirty (30) days from the date of the letter with corrections or information, or provide the estimated date when the corrected documents will be filed. It is not necessary to refile all of the petition exhibits; only the revised petition form and revised exhibits need to be refiled. If you have any further questions, feel free to contact me at 515-725-7339 or at [bao.nguyen@iub.iowa.gov](mailto:bao.nguyen@iub.iowa.gov).

Sincerely,

*/s/ Bao Nguyen*

Bao Nguyen  
Utilities Regulation Engineer  
Safety and Engineering Section